

**REMARKS**

In view of the following remarks, the Examiner is respectfully requested to allow claims 22-29, 32-35, and 37-39 the only claims pending and currently under examination in this application after entry of the above amendments.

Claim 22 has been amended. Support for this amendment may be found in the specification, for example, at para [0078]- para [0079]. Claims 1-21 and 30-31 have been previously withdrawn. Claim 36 has been cancelled. Accordingly, no new matter has been added by the amendments filed herein.

**REJECTIONS UNDER 35 U.S.C. § 102**

Claims 22-27 have been rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by Kurdi et al. (U.S. Patent No. 5,932,113).

According to the M.P.E.P § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim.

As amended, claim 22, and the claims dependent thereon, is directed to a method for forming a slider assembly. The method includes arranging a plurality of sliders, each having a surface such that the surfaces are coplanar to each other, dispensing a silicon-based encapsulant fluid in a manner effective to fill gaps or recesses between the sliders, without contacting the coplanar slider surfaces; and subjecting the dispensed encapsulant fluid to **a curing temperature of 150°C or more, which is** effective for the fluid to form a readily debondable solid encapsulant comprising a silicon-based polymer.

Accordingly, an element of Claim 22 is a silicon-based encapsulant fluid that forms a readily debondable silicon-based solid encapsulant when subjected to **a curing temperature of 150°C or more.**

Kurdi et al. does not anticipate claim 22 because the reference fails to teach the element of subjecting a silicon-based encapsulant fluid to **a curing temperature of 150°C or more.** Kurdi et al. fails to teach this element because, according to the disclosure, Kurdi specifically states the following:

The fluid is then cured by exposure to ultraviolet irradiation through the adhesive film which converts the fluid to a solid encapsulating material, resistant to photoresist solvent and developers. As shown in FIG. 6, the removal of laminate gives a nearly planarized carrier 10 cured fluid 20' filled recesses 18 and rows 12, produced by a method which is done at ambient temperature and with protection of the ABS surface by the adhesive film.

(col. 7, lines 5-12)

As such, the encapsulant described by Kurdi is cured at ambient temperatures. The Applicants contend that one of skill in the art would fully understand the term “ambient temperature” to mean the following:

**Room temperature (also referred to as ambient temperature) is a common term to denote a certain temperature within enclosed space at which human beings are accustomed. Room temperature is thus often indicated by general human comfort, with the common range of 18°C (64°F) to 23°C (73°F).**

(From Wikipedia, the free encyclopedia)

As such, in view of the above, Kurdi does not teach all the elements of claim 22 because Kurdi fails to teach a silicon-based encapsulant fluid that forms a readily debondable silicon-based solid encapsulant when subjected to **a curing temperature of 150°C or more.** Accordingly, the Applicants respectfully request that this rejection be withdrawn.

**REJECTIONS UNDER 35 U.S.C. § 103(a)**

Claims 22-29, 32-34, and 36-39 have been rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Kurdi et al. in view of Mandell et al. (U.S. Patent No. 3,335,088) and Wong et al. (U.S. Patent No. 5,051,275).

According to the MPEP § 706.02 (j), to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As set forth below, the Applicants submit that a *prima facie* case of obviousness has not been established for the following reasons:

- Kurdi et al. does not teach all of the elements of the claimed invention and in fact teaches away there from;
- It is improper to cite Wong et al. in the rejection because Kurdi teaches away from such a combination; and
- Mandell et al. fails to make up for the deficiency of Kurdi et al.

The instant claims are drawn to a method for forming a slider assembly in which an encapsulant fluid is subjected to **a curing temperature of 150°C or more, which is** effective for the fluid to form a readily debondable solid encapsulant comprising a silicon-based polymer.

The MPEP § 2142.02 specifically states that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.

Kurdi et al. is drawn to **a low temperature encapsulation system** wherein the encapsulant is cured at ambient temperatures. A feature of Kurdi et al. is that the disclosed

method for processing a thin film surface is performed at low temperatures including the curing step which occurs at ambient temperature. Therefore, based on the teaching of Kurdi et al., it would not be obvious to one of skill in the art to cure the encapsulant at a temperature of 150°C or more, as in the present invention, because the reference teaches away from curing at a temperature other than ambient temperature.

In making the rejection, the Examiner additionally cites Wong et al. However, the Applicants submit that it is improper to cite Wong et al. in the rejection because Kurdi teaches away from such a combination.

According to MPEP § 2145: it is improper to combine references where the references teach away from their combination.

Wong et al. is directed to a specific encapsulation formulation comprising 33 to 39 weight percent of a silicone resin, 51 to 57 weight percent of a silicon dioxide and 8 to 12 weight percent of a high boiling point organic solvent. For instance, as recited at page 4 of the 17 October 2007 Office Action: "...the silicone-based polymer encapsulant is applied as a fluid including a solvent and during subsequent crosslinking and/or polymerization *in situ* at 120 °C the solvent is removed." As such, Wong et al. recites an encapsulation formulation which requires a high curing temperature in order to remove the organic solvent during the encapsulation process.

However, as previously discussed above, Kurdi actually teaches away from a curing temperature of 150°C or more because the disclosure specifically requires curing to occur at ambient temperatures. The Applicants submit that it would not be obvious to one of skill in the art to combine the teachings of Kurdi et al., which is directed towards low temperature encapsulation methods, with Wong et al., which recites an encapsulation formulation which requires curing to occur at high temperatures.

Therefore, the Applicants submit that it is improper to combine Kurdi et al. with Wong et al. because Kurdi et al. teaches away from their combination. Therefore, Wong et al. is not an available reference to remedy the deficiencies of Kurdi et al.

Finally, as previously set forth above, Kurdi is deficient in that it fails to teach such a curing temperature as specified in the instant invention. As Mandell et al. was cited solely for the proposition that acrylic and silicone elastomer based encapsulants are functionally equivalent, the Applicants maintain that this reference fails to make up for the deficiency of Kurdi et al. Accordingly, the combined teachings of Kurdi et al. and Mandell et al. fail to render the instant invention obvious because neither reference teaches the element of a silicon-based encapsulant fluid that forms a readily debondable silicon-based solid encapsulant when subjected to **a curing temperature of 150°C or more.**

In view of the above, a *prima facie* case of obviousness has not been established for at least three reasons, namely, (1) Kurdi et al. does not teach all of the elements of the claimed invention, and in fact teaches away there from; (2) it is improper to cite Wong et al. in the rejection because Kurdi teaches away from such a combination; and (3) Mandell et al. fails to make up for the deficiency of Kurdi et al. Therefore, the Applicants respectfully request that this rejection be withdrawn.

Claim 35 has been rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Kurdi et al. in view of Mandell et al. and Wong et al. ('275) and further in view of Joffre et al. (U.S. Patent No. 5,840,800) and Wong (U.S. Patent No. 4,564,562).

Claim 35 ultimately depends from Claim 22. As set forth above, an element of Claim 22 includes a silicon-based encapsulant fluid that forms a readily debondable silicon-based solid encapsulant when subjected to **a curing temperature of 150°C or more.**

As set forth above, the combination of Kurdi, Mandell and Wong is deficient for at least three reasons, namely, (1) Kurdi et al. does not teach all of the elements of the claimed invention and in fact teaches away there from; (2) it is improper to cite Wong et al. in the rejection because

Kurdi teaches away from such a combination; and (3) Mandell et al. fails to make up for the deficiency of Kurdi et al.

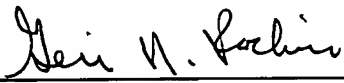
As Joffre was cited solely for the proposition that amino based catalysts are functionally equivalent to metallic catalysts and Wong et al. ('562) for teaching a polymeric catalyst, the Applicants maintain that neither Joffre et al. nor Wong et al. ('562) fail to remedy the deficiencies of the combination of Kurdi, Mandell and Wong ('275).

Accordingly, the Applicants submit that claim 35 is not obvious over Kurdi et al. in view of Mandell et al. and Wong et al. ('275) and in further view of Joffre et al. nor Wong et al. ('562). Therefore, the Applicants respectfully request that this rejection be withdrawn.

### CONCLUSION

Applicants respectfully submit that the application is in condition for allowance and request an allowance for same. Please charge any fees due or credit any overpayment to the undersigned's Deposit Account No. 18-0580, Reference No. 4800-0001.

Respectfully submitted,

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